

## **AMENDMENTS TO THE CLAIMS:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

### **Listing of Claims:**

Claims 1-10 (canceled).

11. (New) An optical imaging system comprising: a system (1) of optical components for generating an image of a surface (20.1) of a component (20) which emits light which is radially symmetrical, at least in part, for an optical surface measurement thereof, the surface normal of the radially symmetrical region in the measuring position of the component being inclined at a maximum angle of 90° with respect to the component axis, wherein the system (1) is designed for measuring outer surfaces (20.1), and includes a mirror (2) which in a measuring mode captures a portion of the beam emitted from the radially symmetrical region of the surface to be measured and supplies same to additional imaging components in the system (1) for processing the image.
12. (New) The imaging system according to Claim 11, wherein the mirror (2) is associated with the component (20).
13. (New) The imaging system according to Claim 11, wherein the mirror (2) has a radially symmetrical design, at least in part, and in measuring mode is designed and positioned for directly receiving the light emitted from the region.
14. (New) The imaging system according to Claim 11, wherein the mirror (2) has a circumferential radially symmetrical design and a central opening (2.2), and a reflecting optical element (3) situated in the beam path downstream from the mirror (2) receives the light reflected from the mirror (2) and directs the light through the central opening (2.2).
15. (New) The imaging system according to Claim 13, wherein the mirror (2) has a circumferential radially symmetrical design and a central opening (2.2), and a reflecting optical element (3) situated in the beam path downstream from the mirror

- (2) receives the light reflected from the mirror (2) and directs the light through the central opening (2.2).
16. (New) The imaging system according to Claim 14, wherein the reflecting optical element (3) has a radially symmetrical design and a central opening (3.2).
  17. (New) The imaging system according to Claim 15, wherein the reflecting optical element (3) has a radially symmetrical design and a central opening (3.2).
  18. (New) The imaging system according to Claim 14, wherein lens elements (4, 5) for processing the image are provided in the beam path downstream from the reflecting optical element (3).
  19. (New) The imaging system according to Claim 15, wherein lens elements (4, 5) for processing the image are provided in the beam path downstream from the reflecting optical element (3).
  20. (New) The imaging system according to Claim 16, wherein lens elements (4, 5) for processing the image are provided in the beam path downstream from the reflecting optical element (3).
  21. (New) The imaging system according to Claim 17, wherein lens elements (4, 5) for processing the image are provided in the beam path downstream from the reflecting optical element (3).
  22. (New) The imaging system according to Claim 11, wherein the system (1) is designed to generate an image that can be interferometrically evaluated.
  23. (New) The imaging system according to Claim 13, wherein the system (1) is designed to generate an image that can be interferometrically evaluated.
  24. (New) The imaging system according to Claim 11, wherein the system (1) has a two-dimensional image recorder (6) on which the imaging occurs.
  25. (New) The imaging system according to Claim 13, wherein the system (1) has a two-dimensional image recorder (6) on which the imaging occurs.

26. (New) The imaging system according to Claim 11, wherein the system (1) is designed as an object arm of an interferometric measuring system.
27. (New) The imaging system according to Claim 13, wherein the system (1) is designed as an object arm of an interferometric measuring system.
28. (New) The imaging system according to Claim 26, wherein the system (1) is designed to generate an intermediate image.
29. (New) The imaging system according to Claim 11, wherein a transmissive optical element is provided directly downstream from the mirror (2) for receiving the beam reflected from the mirror.
30. (New) The imaging system according to Claim 13, wherein a transmissive optical element is provided directly downstream from the mirror (2) for receiving the beam reflected from the mirror.